
Construction Rules for the Morningstar® Global Wide Moat Focus IndexSM Family

Morningstar Indexes

April 2020

Contents

- 1 Overview
- 2 Index Construction
 - 2.1 Assigning Stocks to the Index
 - 2.2 Number of Stocks
 - 2.3 Index Weighting
- 3 Index Maintenance and Calculation
 - 3.1 Scheduled Maintenance
 - 3.2 Corporate Action
 - 3.3 Index Calculation and Price Data
- 4 Methodology Review and Index Cessation Policy
- 5 Data Correction and Precision
 - 5.1 Intraday Index Data Corrections
 - 5.2 Index-Related Data and Divisor Corrections
 - 5.3 Computational and Reporting Precision
- 6 Appendixes
 - 6.1 Glossary
 - 6.2 Staggered Reconstitution Process
 - 6.3 Modification to Rulebook
 - 6.4 Individual Indexes
- 7 About Morningstar

Overview

The Morningstar Global Wide Moat Focus Index family provides exposure to companies with Morningstar® Economic Moat™ Ratings of wide that are trading at the lowest current market price/fair value ratios. Moat ratings and fair value estimates are determined through independent research conducted by the Morningstar Equity Research team.

For more information on the moat rating process and fair value estimation performed by Morningstar Equity Research, refer to [Morningstar Equity Research Methodology](#).

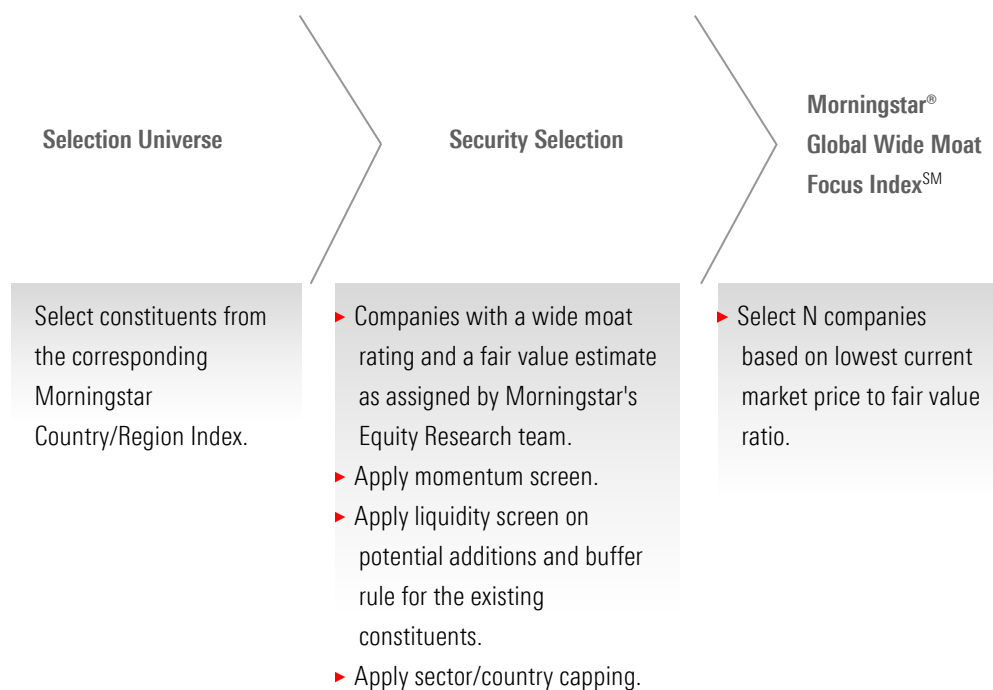
This index does not incorporate Environmental, Social, or Governance (ESG) criteria.

Index Inception Date and Performance Inception Date

The inception dates of the indexes as well as performance inception dates, when the first back-tested index value was calculated, are provided in the appendix.

Index Construction

Exhibit 1 Morningstar Global Wide Moat Focus Index Family Construction Process



For additional details, refer to the "Assigning Stocks to the Index" section. N for each index is provided in the appendix.

Assigning Stocks to the Index

Each Morningstar Global Wide Moat Focus Index consists of two subportfolios of N companies.¹

Selection Universe

At each reconstitution, constituents of the Morningstar Global Wide Moat Focus Index are derived from the corresponding Morningstar Country/Region Index (benchmark). For more details on benchmark construction, refer to the [Construction Rules for Morningstar Global Markets Index](#).

Security Selection

To be eligible for the index, all constituents must meet the following criteria in sequence:

- ▶ Analyst Data
 - ▶ Company is assigned an economic moat rating of wide by Morningstar's Equity Research team.
 - ▶ Company is assigned a fair value estimate by Morningstar's Equity Research team.

¹ N for each index is provided in the appendix.

- ▶ Company's fair value estimate is not under review at the time of reconstitution.
 - ▶ A company may go under review, either because the analyst is incorporating new information into the valuation model or because of a transition in analyst coverage.
 - ▶ Morningstar's Equity Research team strives to minimize the amount of time a fair value estimate is under review, particularly for moat-rated stocks, and therefore it is expected to be rare for a stock to drop out of the index for this reason.

- ▶ Company must have 12 months of price history.

- ▶ If a company has more than one eligible share class:
 - ▶ Select the one that is a current index constituent.
 - ▶ Otherwise, select the most liquid share class determined by Morningstar Indexes.

- ▶ Momentum Screen

Eligible securities are ranked by the percentage change in price from 12 months ago. The securities in the bottom 20% are screened out.

- ▶ Liquidity Filter

Nonindex constituents having three-month average daily trading value, or ADTV, of less than 5 Million USD are screened out.

- ▶ Buffer Rules

Index constituents of the subportfolio ranked within the top 2 times of N in the eligible universe based on current market price/fair value ratio are given preference in subsequent steps.

- ▶ Country and Sector Capping

The maximum weight of an individual country or sector in the index is capped at 10% plus its corresponding weight in the benchmark, or 40%, whichever is higher.

$$\text{Maximum Sector Weight} = \text{Max}(40\%, \text{benchmark weight} + 10\%)$$

$$\text{Maximum Country Weight} = \text{Max}(40\%, \text{benchmark weight} + 10\%)$$

- ▶ Portfolio Selection

At this stage, all buffered constituents are retained in the index. From among the remaining companies, those representing the lowest current market price/fair value ratios are included in the index until the number of constituents reaches N. The two subportfolios are consolidated to form the aggregate portfolio.

Number of Stocks

Each reconstituted subportfolio targets N constituents based on a transparent ranking system subject to selection and eligibility criteria at reconstitution. However, if securities fall short of the selection and eligibility criteria, or if securities are added or deleted as a result of corporate actions after reconstitution, the subportfolio can hold more or fewer than N companies. In addition, securities that are deleted from the corresponding benchmark index after June and December reconstitutions are simultaneously deleted from the Morningstar Global Wide Moat Focus Index. The aggregate portfolio can contain between N and (2*N) constituents.

Index Weighting

The index is equal-weighted. For more details, refer to the [Morningstar Indexes Calculation Methodology rulebook](#).

Index Maintenance and Calculation**Scheduled Maintenance**

The subportfolios are reconstituted semiannually with a quarterly staggered schedule. Consequently, about half of the total index membership is reset every quarter in March, June, September, and December, on the Monday following the third Friday. If Monday is a holiday, it is effective on the immediate following business day. In addition, the subportfolio weights are reset to 50% each in June and December. Refer to Appendix 2 for the staggered reconstitution implementation process.

The analyst data (moat rating and fair value estimates) used to reconstitute the index is as of the Tuesday before the second Friday of the reconstitution month.

Refer to Appendix 1 for details on reconstitution and rebalancing.

Corporate Action

The treatment of corporate actions can be found in the [Morningstar Indexes Corporate Actions Methodology rulebook](#).

Index Calculation and Price Data

Details about index calculations and price data can be found in their respective rulebooks: [Morningstar Indexes Calculation Methodology](#) and [Equity Closing Prices Used for Index Calculation](#).

Methodology Review and Index Cessation Policy

The index methodology is continually reviewed to ensure it achieves all stated objectives. These reviews take into account corporate action treatment, selection, and maintenance procedures. Subscribers to the index will be notified before any methodology changes are made. For more details, refer to the [Morningstar Index Methodology Change Process](#).

Morningstar also notifies all subscribers and stakeholders of the index that circumstances might arise that require a material change to the index, or a possible cessation of the index. Circumstances that could lead to an index cessation include, but are not limited to, market structure change, product definition change, inadequate supply of data, insufficient revenue associated with the index, insufficient number of clients using the index, and/or other external factors beyond the control of the Morningstar Index Committee.

Because the cessation of the index or benchmark index could disrupt subscriber products that reference this index, all subscribers are encouraged to have robust fallback procedures if an index is terminated. For more details, refer to the [Morningstar Index Cessation Process](#).

Data Correction and Precision

Intraday Index Data Corrections

Commercially reasonable efforts are made to ensure the accuracy of data used in real-time index calculations. If incorrect price or corporate action data affect index daily highs or lows, they are corrected retroactively as soon as is feasible.

Index-Related Data and Divisor Corrections

Incorrect pricing and corporate action data for individual issues in the database will be corrected upon detection. In addition, an incorrect divisor of an index, if discovered within five days of its occurrence, will always be fixed retroactively on the day it is discovered to prevent an error from being carried forward. Commercially reasonable efforts are made to correct an older error subject to its significance and feasibility.

For more details, refer to the [Recalculation Guidelines](#).

Computational and Reporting Precision

For reporting purposes, index values are rounded to two decimal places and divisors are rounded to appropriate decimal places.

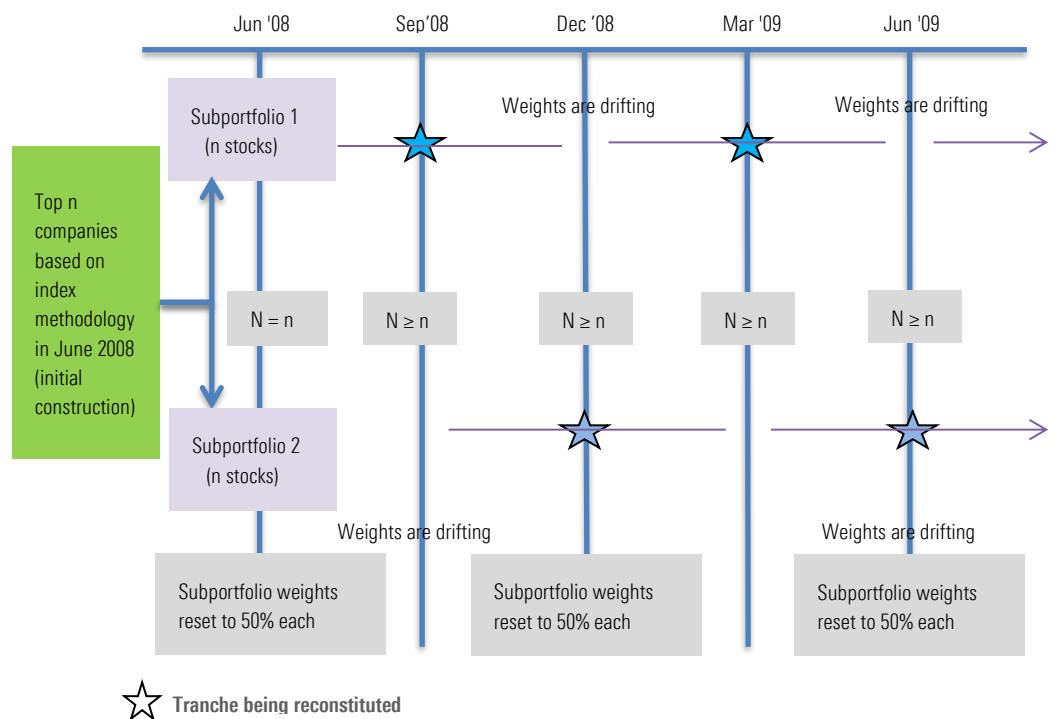
Appendixes

Appendix 1: Glossary

Terms	Description
Reconstitution	During each reconstitution, the steps mentioned in the index construction process are performed, resulting in membership reset.
Rebalance	During each rebalancing, the weights are reset and adjusted for updated free-float and shares outstanding data.

Appendix 2: Staggered Reconstitution Process

Exhibit 2 Staggered Reconstitution Schematic



The portfolio construction process is described below:

1. At initial construction (eg. June 2008), both of the subportfolios are reconstituted at the same time and therefore have an identical portfolio composition. The subportfolios are set to equal weights at 50% each.
2. In September, only the first subportfolio is reconstituted, while the second is not (drifted leg). As a result, the composition of the subportfolios may not remain identical.

3. In December, the second subportfolio is reconstituted and the first forms the drifted leg. In addition, the subportfolio weights are reset to 50% each and distributed among the securities within them in proportion to their weights.
4. In March, the first subportfolio is reconstituted again.
5. In June, the second subportfolio is reconstituted. In addition, the subportfolio weights are reset to 50%.
6. The process is repeated (go to Step 2).

Appendix 3: Modification to Rulebook

Section	Description	Update Date
Index Construction	Liquidity Filter to be applied before Buffer Rules	June 2017

Appendix 4: Individual Indexes

Index	Performance Inception Date	Calculation Inception Date	Number of constituents (N)*
Developed Markets Wide Moat Focus	December 21, 2007	April 28, 2017	50
Global ex-India Wide Moat Focus	December 21, 2007	August 10, 2017	50
Developed Markets ex-Australia Wide Moat Focus	December 21, 2007	September 18, 2017	50
Global Wide Moat Focus	December 21, 2007	April 23, 2018	50

* Number of constituents is targeted for each sub-portfolio

About Morningstar, Inc.

Morningstar, Inc. is a leading provider of independent investment research in North America, Europe, Australia, and Asia. Morningstar offers an extensive line of products and services for individual investors, financial advisors, asset managers, and retirement plan providers and sponsors. Morningstar provides data on approximately 510,000 investment offerings, including stocks, mutual funds, and similar vehicles, along with real-time global market data on more than 17 million equities, indexes, futures, options, commodities, and precious metals, in addition to foreign exchange and Treasury markets. Morningstar also offers investment management services through its investment advisory subsidiaries.

About Morningstar Indexes

Morningstar® Indexes combine the science and art of indexing to give investors a clearer view into the world's financial markets. Our indexes are based on transparent, rules-based methodologies that are thoroughly back-tested and supported by original research. Covering all major asset classes, our indexes originate from the Morningstar Investment Research Ecosystem—our network of accomplished analysts and researchers working to interpret and improve the investment landscape. Clients such as exchange-traded fund providers and other asset management firms work with our team of experts to create distinct, investor-focused products based on our indexes. Morningstar Indexes also serve as a precise benchmarking resource.

Morningstar Equity and Credit Research

With more than 120 equity and credit analysts, Morningstar is one of the largest independent sources of equity and credit research in the world. The analysts evaluate companies using a methodology built on fundamental analysis that scrutinizes a company's competitive advantages.

Morningstar Index Product Committee

The Morningstar Index Product Committee is comprised of members who possess a wide array of knowledge in relation to Indexes. The Product Committee is responsible for the governance over the creation and maintenance of all Morningstar branded Indexes, ensuring the highest standards are continuously met. Any matters arising from exceptional or undocumented events will be resolved at the discretion of the Morningstar Index Product Committee.

Morningstar Index Oversight Committee

The Morningstar Index Oversight Committee is comprised of informed and qualified professionals who are responsible for the process governance of Morningstar branded Indexes. The Oversight Committee assesses and where appropriate challenges the decisions of Morningstar Indexes with regards to benchmark decisions.

For More Information

For any queries, reach out to us via our [communication page](#).



22 West Washington Street
Chicago, IL 60602 USA

©2020 Morningstar. All Rights Reserved.

The information in this document is the property of Morningstar, Inc. Reproduction or transcription by any means, in whole or part, without the prior written consent of Morningstar, Inc., is prohibited. While data contained in this report are gathered from reliable sources, accuracy and completeness cannot be guaranteed. All data, information, and opinions are subject to change without notice. This document may contain back-tested or simulated performances and the subsequent results achieved by the investment strategy may be materially different.